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1.	86 250370	Duamish	86-06-13	8.93
2.	71	Platedrain		13.04
3.	72	Platedrain		12.96
4.	73	Platedrain		13.04

5.	86 344550	Platedrain	86-06-22	10.33
6.	51	Truck wash	86-08-20	12.43
7.	52	Black hose	86-08-20	8.95
8.	53	Blobs Duamish	86-08-20	9.69

Fairview-Lk Union

9.	86 380010	North tank	86-09-15	13.02
10.	86 380011	North tank	86-09-15	identical Just tested
11.	86 380012	C+O truck	86-09-18	13.13



Pioneer Construction Materials Co. - Lake Union

Possible Counts	Evidence	Witnesses	Report #
			21.
1. 4-4-1986 NE drain	Observations Notes	Bruce R. Burrow, Inspector, METRO	
2. 4-21-1986 NE drain	Photos + Drawing	Stephen A. Wille, Cooper Consult. Inc. (U.S. Army CoE)	20.
3. 9-11-1986 Conveyor Belt Tower	Observations	G.R. Hattwig + S/A's	20.
4. 9-11-1986 Cement waste pile	Observations photos	G.R. Hattwig + S/A's	20.
5. 9-12-1986 channel south of tank	Observations photos	G.R. Hattwig + S/A's	20.
6. 9-12-1986 Conveyor Belt Tower	Observations photos	G.R. Hattwig + S/A's	20.
7. 9-15-1986 Metal Plate drain	Observations	G.R. Hattwig	20.
8. 9-15-1986 NE drain	Observations-photos + sample	G.R. Hattwig, SPD officers: C. Kearney + D. Engle	20.
9. 9-16-1986 Metal Plate drain	Observations Photos - Video	G.R. Hattwig + K. Purdy	20.

10. 9-16-1986 Observations G.R. Hattwig + K. Purdy 20.
Clam shell Op. Photos + Video
(Possibly more than one count)
11. 9-18-1986 Observations G.R. Hattwig + K. Purdy 20.
Metal Plate Drain
12. 9-19-1986 Observations G.R. Hattwig 20.
Metal Plate Drain
13. 9-19-1986 Observations G.R. Hattwig + SPD 20.
Clam shell Op. Officer Avery + Vanpuymbrouck
(Possibly more than one count)
14. 10-9-1986 Observations G.R. Hattwig 23.
West side drain Photos, Video, Sample S/A Purdy + Hileman

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF CRIMINAL INVESTIGATIONS

REPORT OF INVESTIGATION

1. TITLE Pioneer Construction Materials Co.	2. CONTROL NUMBER 86-X-4-4 #20 34W
3. PERIOD COVERED	4. REPORTING OFFICE Seattle 10/15/86

SYNOPSIS:

On 9/11/86 S/A Gerd Hattwig started a surveillance of the concrete plant operated by Pioneer Construction Materials Co. at the south end of Lake Union in Seattle, WA. The street address of this plant is 901 Fairview Ave. North, Seattle, WA.

From 8:50 AM to 9:12 AM S/A Hattwig observed the steady flow of a grayish-brown liquid running out from a point about 30 ft. up a tower-like structure. This tower was part of the conveyor belt system which transported sand and gravel from the pier into the concrete mixing plant. Built on this pier which extends north into Lake Union was a large crane. Sand and gravel barges were tied up to this pier. The discharge ran out of the end of a pipe, fell about 30 ft. onto the pier and ran over the east side of the pier into Lake Union. The Lake water was discolored in an area about 10' by 10' which was visible from the opposite shore of the waterway. Also visible from this location was a conveyor belt which was operating.

Additionally, S/A Hattwig observed numerous concrete mixer trucks being washed out and discharging wastewater into the recovery system. These concrete trucks were driving in the yard of this plant in about 1' to 1 1/2' of murky gray-brown water--high enough to cover the tires up to the rim of the wheels.

From about 1:30 PM to 1:50 PM S/A's Purdy, Mann, McClary and Hattwig observed a continuous discharge of muddy liquid onto the pier from the tower-like structure.

At about 5:04 PM S/A Hattwig returned to the surveillance and took up a position along the public parking area along Lake Union. At that time the discharge from the tower was no longer occurring. S/A Hattwig observed a large number of concrete mixer trucks returning to the plant and washing out their drums in the truck wash area. A white male was also observed operating a skiploader and digging out some gray material in the vicinity of the truck wash area at about 5:35 PM. The gray matter appeared to be wet cement debris that was being removed from an area to the west of the auger-like recovery system. This gray material appeared to be very wet since liquid was dripping from the bucket of the frontend loader as it transported the material. The material was dumped on large high piles of what appeared to be cement waste on the west side of the property. S/A Hattwig also noticed the presence of a metal plate on the cement wall of the cement wastewater settling tank. This plate was on the east wall at the southern end of the tank between the second and third wood piling (counting from the south). Wetness on the cement wall around the metal was clearly visible, however the metal plate appeared to be dry.

REPORT MADE BY S/A Gerd Hattwig	DATE 10/15/86
REVIEWING OFFICIAL SAIC Dixon McClary	DATE 4/3/87

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CONTINUATION SHEET

CONTINUED:

At 5:54 PM S/A Hattwig observed the Pioneer facility from the public pier located on the west side of the plant. Looking east, piles of cement debris were visible along the north and west shoreline of the Pioneer plant. It appeared that cement debris flowed or rolled into the south end of Lake Union.

On 9/12/86 S/A Hattwig resumed his surveillance of the Pioneer plant at Lake Union. At about 9:25 AM with the morning sun shining on the truck wash area, S/A Hattwig observed the discharge of a liquid from the flooded yard through a channel between the bulkhead and the south end of settling tank. A concrete mixer truck was observed discharging liquid and sludge into the auger-like recovery system which caused an overflow of liquid from the system at the south end. It appeared from the proximity of the recovery system overflow to the channel between the bulkhead and the settling tank that this liquid was running through this channel into the lake. A steady stream of this liquid was observed to be flowing into Lake Union and continued until about 1:00 PM when surveillance was terminated.

Additionally, S/A Hattwig observed that the lower half of the metal plate on the cement wall of the settling tank was wet. The water level of the Lake was about 3 ft. below the plate and no wetness was visible at any other area on the settling tank wall at the same height. The area just below the metal plate appeared to be wet and was clearly stained gray.

Additionally, at 9:47 AM, a brown liquid was again observed to be discharging from the tower-like structure. The conveyor belt system was operating at that time and the crane and clamshell at the end of this pier was unloading sand and gravel from a barge. The flow of the brown liquid was less than had been observed on 9/11/86. At 10:56 AM the flow from the tower increased significantly and was forming puddles on the pier. At 12:45 PM S/A Hattwig was joined on the surveillance by S/A's McClary, Mann and Purdy on the east side of the waterway. Looking west all the agents witnessed the flow of a brownish liquid into Lake Union from the channel between the settling tank and the bulkhead. At that time the discharge from the tower had stopped. Agents observed, however, that the pier under the tower and on the east edge where the liquid would have entered Lake Union was still wet. Surveillance was terminated at 1:00 PM on 9/12/86.

On 9/15/86 at 9:00 AM S/A Hattwig resumed surveillance at Pioneer's Lake Union facility. S/A Hattwig observed concrete mixer trucks being washed and the contents of their drums being dumped into the auger-like recovery system. The metal plate attached to the wall of the settling tank was wet. An area about 1 ft. extending around and above the plate on the cement wall was also wet. No rain had been falling and the waves of Lake Union were about 2 ft. below the metal plate. Additionally, the southern corner of the metal plate was covered with a gray material, as was the entire area directly below the metal plate. None of these conditions existed as of 1:00 PM on 9/12/86. It seemed obvious that a discharge from the settling tank occurred between 1:00 PM, 9/12/86 and 9:00 AM on 9/15/86 through a drain behind the metal plate. (Hereafter referred to as metal plate drain.)

Additional observations from the public pier to the west of the Pioneer facility disclosed two clearly distinguishable drain holes in the concrete bulkhead.

CONTINUATION SHEET

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Both drain holes were marked by gray stains leading toward the water line. Neither of the drains appeared to be discharging at that time, but from the gray stains it was obvious that discharges had occurred from these point sources in the past. Both of the drains were located in an area directly below the large cement waste pile on the west side of the Pioneer facility. This surveillance was terminated at 9:42 AM.

On 9/15/86, at about 5:30 PM, S/A Hattwig resumed the surveillance of Pioneer's Lake Union facility from across waterway #6. A number of concrete mixer trucks were pulling into the truck wash area. The trucks were being washed out and the content of their drums were being dumped into the auger-like recovery system.

The metal plate drain on the southeast side of the settling tank was discharging a yellowish-gray liquid which was running from the lower part of the metal plate. Additionally, a slight discharge of a brown liquid was observed through the channel between the bulkhead and the settling tank. Those discharges were observed until 6:05 PM when surveillance from that position was discontinued. During that time concrete mixer trucks continued to dump liquid into the auger-like recovery system and it would overflow into the yard at regular intervals.

Additionally, at about 5:56 PM S/A Hattwig observed a young female truck driver, wearing rubber boots, blue jeans, blue t-shirt with a darker blue square emblem on the front, and blond shoulder length hair. She apparently noticed the two discharges and was looking into the lake at the area of the discharges and talking to another male truck driver. At about 6:00 PM that female appeared to be pointing out the discharges to another older male workman, wearing blue coveralls, a red cap with a white front and a red visor. That male then walked over to and operated some control levers located between the auger-like recovery device and the settling tank. However, the discharge continued until 6:05 PM.

From 6:20 PM to 6:38 PM S/A Hattwig was on-board the Seattle Harbor Patrol Boat #3 operated by Seattle Police Officers C. Kearney and D. Engle. After rounding the barge tied up at the north end of the Pioneer pier, the police officers and S/A Hattwig observed a discharge from the northeastern corner of the settling tank. S/A Hattwig took a sample of the discharge. This sample was sent to the EPA Region 10 laboratory for analysis.

An attempt was made to maneuver the patrol boat close to the area of the metal plate drain for photographs and samples; however, this was not possible due to the shallow water next to the settling tank. Additionally, the officers and S/A Hattwig observed that cement debris was forming the shoreline between the settling tank and the northern part of the pier where the barge was tied up.

At about 9:15 AM on 9/16/86, S/A Hattwig continued his surveillance of the Pioneer Lake Union facility. At that time there was a brownish substance discharging from behind the metal plate drain at a steady rate. The crane which operated the clamshell bucket used to clean out the settling tank was running. Three white males, one of them wearing a green hardhat and two wearing orange hardhats, were on the facility looking around. Surveillance was discontinued at 9:26 AM.

CONTINUATION SHEET

86-X-4-4 #20 34W

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At 10:10 AM, S/A's Hattwig and Purdy reestablished surveillance in a public parking area on the east side of waterway #6. Both agents observed the steady discharge of a brownish liquid from the plate drain until about 10:23 AM. At that time the discharge became intermittent. The irregularity of the discharge appeared to be caused by the clamshell operation going on at this time. The crane operator was dropping the clamshell bucket of the crane into the settling tank and removing cement sludge and liquid from the tank. Each time the clamshell was dropped into the settling tank, cement wastewater would splash over the side into Lake Union. Each time the operator would lift the full clamshell out of the settling tank it would spill large amounts of cement waste and liquid into Lake Union as the clamshell would swing east and north over Lake Union. The debris was deposited by the crane at the north end of the property. S/A Purdy was recording these activities by means of a video recorder and with a 35 mm camera.

Additionally, the S/A's observed a young white male, about 6' tall with a mustache, wearing a green hardhat, taking liquid samples at the Pioneer facility. This individual then walked out of the facility and took water samples opposite the Pioneer facility on waterway #6 just below the surveillance point of the agents. He did not address the agents but appeared to be writing down the license number and description of S/A Hattwig's government vehicle. This surveillance was terminated at 10:50 AM.

On 9/18/86 at 8:55 AM S/A Hattwig observed the discharge of a brownish liquid substance into Lake Union from the metal plate drain at the settling tank at the Lake Union facility of Pioneer. There was a black piece of plastic hanging from one side of the metal plate. Concrete mixer trucks were dumping the contents of their drums into the auger-like recovery system. The area of the metal plate, on the cement wall, 1' up and to the sides of the metal plate, was wet. The water line of Lake Union at the rest of the facility was 2' below the metal plate.

At 12:20 PM S/A's Purdy and Hattwig observed the continued steady flow of brown liquid from the metal plate drain. Additionally, at 1:37 PM the S/A's observed a green vacuum tank truck in the yard. The truck had the small red numbers 8657 on its side. The tanker end of the truck had the numbers 318A written on its side. The tank truck appeared to be sucking up liquid from the ground.

At 4:45 PM the surveillance was discontinued but the discharge from the metal plate drain was continuing at a steady rate.

On 9/19/86 at 8:30 AM S/A Hattwig reestablished surveillance of the Lake Union Pioneer plant from across waterway #6. A brown liquid was again discharging into Lake Union from around the metal plate located in the wall of the settling tank. Additionally, the crane and clamshell were operating and the clamshell was located in the settling tank. At 9:00 AM the plate drain was still discharging. S/A Hattwig departed that surveillance point.

At 9:30 AM, S/A Hattwig conducted surveillance of the Pioneer Fairview facility from 1717 N. Northlake Place, Seattle Police Harbor Patrol base. With

CONTINUATION SHEET

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the aid of a spotting scope S/A Hattwig observed the crane with the clamshell taking gray sludge and liquid out of the settling tank. On each pass the clamshell, as it swung over the water, would drop large amounts of liquid and sludge into Lake Union. S/A Hattwig observed five occasions in which the clamshell dropped sludge into the lake.

S/A Hattwig boarded a Seattle Police Harbor Patrol boat on a patrol of the southern end of Lake Union. During this patrol S/A Hattwig observed, at a close range, additional work by the clamshell and crane. Each time the clamshell would pick up a load of sludge from the settling tank it would swing out over Lake Union and drop liquid and sludge into the water. The gray sludge was then deposited on the shoreline at the northeast side of the pier. Three of these incidents were witnessed before it stopped. Harbor Patrol Officers R. Avery and A. Vanpuymbrouck also witnessed these incidents.

On 9/22/86 S/A Hattwig conducted a surveillance of the Pioneer Lake Union plant from 9:10 AM to 9:15 AM. During that time, a green tanker truck from Crosby & Overton, numbered 317A, was observed vacuuming up liquid waste from the ground. A number of concrete mixing trucks were observed being loaded and washed out. No flow was observed from the metal plate drain at the settling tank. S/A Hattwig observed and photographed a number of gray spots visible on the south side of a barge that was moored just north of the property containing the settling tanks and the cement reclaiming operation. These gray spots appear to be drippings from the clamshell which was observed to be operating on 9/19/86 when the operator was cleaning out the settling tank. The barge was located in an area where the clamshell would pass over it as the operator would swing the clamshell from the settling tank to the cement waste area.

On 9/23/86 at 11:55 AM S/A Hattwig continued the surveillance of the Lake Union Pioneer facility. The plant was operating and concrete mixer trucks were being loaded and washed out. The metal plate drain on the settling tank was not discharging despite heavy rains. The major portion of the yard appeared to be flooded with grayish brown liquid. Trucks were driving through about 1 1/2 ft. of liquid. Crosby & Overton tank truck, #317A, drove into the yard. The tank truck operator then attempted to hook up the hoses to the truck. The driver was walking cautiously and it appeared that the liquid would run over the top of his rubber boots at any time. At 12:20 PM the C&O truck left the Lake Union facility and the surveillance was discontinued.

On 9/25/86 at 8:35 AM S/A Hattwig continued the surveillance of the Pioneer Lake Union facility. Observations were conducted from the parking area next to the St. Vincent facility. No flow from the metal plate drain on the settling tank was visible. S/A Hattwig observed the crane with the clamshell bucket moving cement debris from the northeast area of the property further inland. The clamshell operation was continuing at 8:55 AM when the surveillance was discontinued.

On 10/2/86 from 9:50 to 9:55 AM S/A Hattwig conducted a surveillance at Pioneer's Lake Union plant. Due to the presence of a large barge S/A Hattwig was unable to determine if there was any discharge from the metal plate drain. The view of the settling tank and the plate drain was completely blocked by the barge. Tank truck #313A from C&O was observed to be in the yard. S/A Hattwig was able to see cement mixer trucks being washed out at this location.